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HELIX VAR. CIRCUMCARINATA AND PYRAMIDULA ELRODI.

BY ROBT. E. C. STEARNS.

I have to thank Mrs. M. Burton Williamson of this city for the opportunity to examine a specimen of *Pyramidula elrodi* described by Dr. Pilsbry on pages 40-41 of The Nautilus for Angust, 1900. As the example was sent to Mrs. Williamson by Professor Elrod there is no doubt as to its authenticity. The form is unquestionably the same as that described by me in the Annals of the N. Y. Acad. of Sciences, Volume I, November, 1879, as *Helix var. circumcarinata*, Mrs. Williamson's specimen differing only in size, being .85 as compared with .92 and 1.01 of an inch, greater diameter, of my examples.

Several specimens of circumcarinata were given to me by the late A. W. Crawford, of Oakland, some before and some after my description was written. He had numerous examples, received from an acquaintance or friend, who gave "Turloch, in Stanislaus county, Cal.," as the locality where he had found them. Subsequently Mr. Crawford discovered he had been deceived and stated the true locality as being "near Columbia, in Tuolumne county." His friend may have been guilty of a second fib. As I noticed certain characters suggestive of possible relationship to the well-known Epiphragmophora mormonum, which occurs in the Tuolumne region, I have regarded the later habitat given by Mr. Crawford as quite probable.

¹See Binney's Manual of Am. Land-Shells, 1885, p. 141; also, Pilsbry's Catalogue, Phila., 1898, p. 4.

The general region in which Columbia is situated remains to be explored; it has been barely glanced at. Though the occurrence of circumcarinata thereabouts has not been verified by subsequent collectors, its non-occurrence there cannot safely be assumed upon the ground of extreme remoteness from the Montana region explored by Professor Elrod, when we have the more extraordinary fact in the matter of distribution, exhibited by the occurrence of Pyramidula hemphilli Newc. (heretofore eredited to Arizona, Nevada, Idaho, Utah and Colorado), on Catalina Island, twenty-five miles distant from the mainland of southern California, where Mr. Hemphill, some months ago, collected numerous living examples, fifty or more, which he kindly showed me.

Here is a conundrum in geographical distribution, of great interest and certainly "a hard nut to crack."

Hemphill's original find of this peculiar form was in the White Pine mining district, extreme eastern Nevada.

A few years ago the distribution of Vallonia pulchella was given as "Montana eastward, from Canada to, or nearly to the Gulf of Mexico. Europe." In September, 1900, it appeared suddenly upon my grounds in Los Angeles and continued to be abundant for some months; it is now scarce. Whence it came and whither it is going, who can tell?

Los Angeles, Cal., August 26, 1902.

"PYRAMIDULA" ELRODI AND EPIPHRAGMOPHORA CIRCUMCARINATA.

BY H. A. PILSBRY.

Dr. Stearns, having expressed the opinion that the two Helices named above are specifically identical, I have again compared them, and find my previous idea of their distinctness confirmed. My material consists of the types and numerous other specimens of P. elrodi and two specimens of E. circumcarinata, an adult and a young one, received from Dr. Stearns years ago, about the time the species was described. The difference between Dr. Stearns' views and my own, of the affinities of the two Helices, may be due to his

¹ See The Nautilus for October, 1900.